CLAIMS

What is claimed is:

1.   A method of dynamically changing rack capacity on demand, said method comprising:

   receiving a rack equipment capacity alteration request;

   performing an analysis of said rack equipment capacity alteration request; and

   changing performance of rack equipment in accordance with said analysis of said rack equipment capacity alteration request.

2.   The method of claim 1, wherein changing said performance of said rack equipment includes said altering said rack equipment performance settings.

3.   The method of claim 1, wherein changing said performance of said rack equipment includes changing performance capacity by said rack equipment in accordance with said capacity demand plan.

4.   The method of claim 3, wherein said capacity demand plan indicates an increase in a voltage and a frequency of said rack equipment when a demand for capacity increases.

5.   The method of claim 3, wherein said change in said performance of said rack equipment corresponds to a change in a clients business requirements.

6.   The method of claim 1, wherein said controlling said operation comprises automatically changing said performance interactively.

7.   The method of claim 1, further comprising verifying a payment associated with said rack equipment capacity alteration request is made.

8.   A rack equipment capacity on demand system comprising:

rack equipment for processing data;

a capacity demand plan component for controlling operational changes to said rack equipment based on a capacity demand plan; and

a communications bus for coupling said equipment and said capacity control component, wherein said communications bus is utilized for communicating information between said capacity control component and said rack equipment.

9.   The rack equipment capacity on demand system of claim 8, wherein said capacity demand plan component controls the amount of rack equipment resources assigned to an application.

10.   The rack equipment capacity on demand system of claim 8, wherein said capacity demand plan component switches on and off said rack equipment in accordance with said capacity demand plan.

11.   The rack equipment capacity on demand system of claim 8, further comprising a master management control center for coordinating control of rack equipment among a plurality of racks.

12.   The rack equipment capacity on demand system of claim 8, wherein said capacity demand plan policy is dynamically adjustable on the fly.

13.   The rack equipment capacity on demand system of claim 8, wherein said capacity demand plan policy is structured in accordance with business needs of a client.

14.   The rack equipment capacity on demand system of claim 8, further comprising:

a memory for storing equipment information and capacity demand plan information; and

a cross indexing component for cross indexing said equipment information and said capacity demand plan policy information.

15.   A computer-useable storage medium comprising computer-readable program code embodied therein for causing a computer system to implement a power pricing performance instructions comprising:

a capacity demand detection module for detecting indications of requests for capacity demand changes covered by a capacity demand plan;

a capacity demand administration module for administering examination of capacity demand changes; and

an instruction generation module for generating rack equipment performance adjustment commands to implement said capacity demand plan instructions.

16.   The computer storage medium of claim 15, further comprising a telemetry monitoring module for monitoring characteristics and activity of rack equipment associated with said adjustments commands.

17.   The computer storage medium of claim 15, further comprising a event spawning module for generating power pricing events.

5   18.   The computer storage medium of claim 15, wherein said instruction generation module comprises functionality for generating a command to postpone processing.

19.   The computer storage medium of claim 15, wherein said capacity demand plan information is an agreement between a host and a client and is structured in manner to
10   accommodate business activities of said client.

20.   The computer storage medium of claim 15, wherein said telemetry monitoring module also confirms said performance adjustments commands are complied with.